

**Bellwork: 11/2/12**

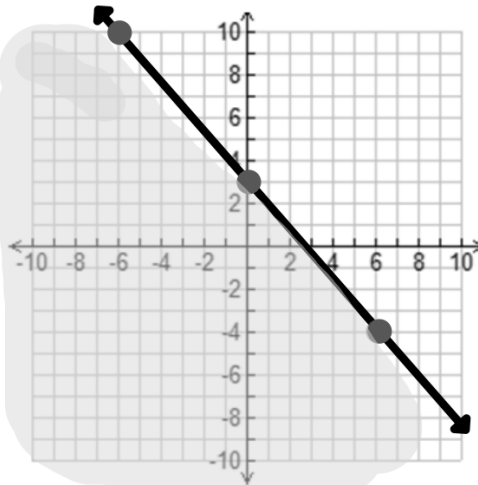
**Write the equation of the line perpendicular to  $3x + y = 1$ ; going through  $(-2, 1)$**

$$\begin{array}{r} 3x + y = 1 \\ -3x \phantom{+ y} = -3x \\ \hline y = -3x + 1 \end{array}$$

$$m_{\perp} = \frac{1}{3}; (-2, 1)$$

$$\begin{aligned} y - y_1 &= m(x - x_1) \\ y - 1 &= \frac{1}{3}(x + 2) \\ y - 1 &= \frac{1}{3}x + \frac{2}{3} \\ y + 1 &= \frac{1}{3}x + \frac{2}{3} + 1 \end{aligned}$$

$$y = \frac{1}{3}x + \frac{5}{3}$$



**Write the equation of the following graph**

$$y \leq -\frac{7}{6}x + 3$$

① ~~(A)  $x^3 \geq x^2$~~   $8 \geq 4$   $-8 \geq 4$

~~(B)  $3x^2 \geq 2x^3$~~   $12 \geq 16$

**(C)  $(2x)^2 \geq 3x^2$**   $16 \geq 12$   $16 \geq 12$

~~(D)  $3(x-2)^2 \geq 3x^2 - 2$~~   $0 \geq 10$

②  $2\sqrt{51 \times \textcircled{25}}$

$2\sqrt{51 \cdot 5} \quad 31.93$

$10\sqrt{51}$   
71.41

~~Ⓐ 5~~

$2\sqrt{(51 \times 5)}$

Ⓑ 25

Ⓒ 50

Ⓓ 100

$$\textcircled{3} \sqrt{87x}$$

$$\begin{array}{c} \swarrow \quad \searrow \\ 3 \quad 29 \end{array}$$

~~$$\textcircled{A} \sqrt{10}$$~~
~~$$\begin{array}{c} \swarrow \quad \searrow \\ 5 \quad 2 \end{array}$$~~

~~$$\textcircled{B} \sqrt{13}$$~~
~~$$\begin{array}{c} \swarrow \quad \searrow \\ 1 \quad 13 \end{array}$$~~

$$\textcircled{C} \sqrt{21}$$

$$\begin{array}{c} \swarrow \quad \searrow \\ 3 \quad 7 \end{array}$$

$$\textcircled{D} \sqrt{38}$$

$$\begin{array}{c} \swarrow \quad \searrow \\ 2 \quad 19 \end{array}$$

$$24$$

$$\begin{array}{c} \swarrow \quad \searrow \\ 6 \quad 4 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 3 \quad 2 \quad 2 \quad 2 \end{array}$$

$$2\sqrt{6}$$

④ 450 3000

GCF - goes into each number

⑤ LCM - bigger than both #'s

9000  
18000

$$\textcircled{5} \quad 2(2\sqrt{4})^{-2} = .125$$

$$\textcircled{A} \quad \frac{1}{8} = .125$$

$$\textcircled{B} \quad \frac{1}{4} = .25$$

$$\textcircled{C} \quad 16$$

$$\textcircled{D} \quad 32$$

$$2(4)^{-2}$$

$$\frac{2}{4^2} = \frac{2}{16}$$

$$= \frac{1}{8}$$

⑥ 52 day pass 110 week pass

4,432 sold

979 sold

$$52(4432) + 110(979)$$

338,000

$$\textcircled{1} \quad (mx^3+3)(2x^2+5x+2) - (8x^5+20x^4$$

$$2mx^5 + 5mx^4 + 2mx^3 + 6x^2 + 15x + 6$$

$$\textcircled{8x^3} + 6x^2 + 15x + 6$$

$$2m = 8$$

$$m = 4$$



⑧  $x^2$  <sup>add</sup>  $-3x$  <sup>multiply</sup>  $-18$

$$(x+3)(x-6)$$

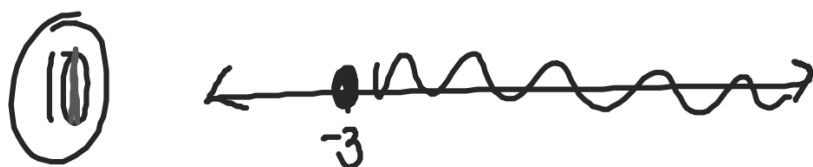
<del>1</del>	<del>18</del>
3	6
<del>2</del>	<del>9</del>

$$\textcircled{10} \quad \frac{5 < \cancel{x} - 3y < 14}{-2 \quad \cancel{-2} \quad -2}$$

$$\frac{3}{-3} < \frac{-3y}{-3} < \frac{12}{-3}$$

$$-1 > y > -4$$

$$\textcircled{B} \quad \boxed{-4 < y < -1}$$



~~Ⓐ  $2x+5 < -1$~~

Ⓑ  $2x+5 \leq -1$

~~Ⓒ  $2x+5 > -1$~~

Ⓓ  $2x+5 \geq -1$

⑫  $8(n) + t$

$65 = 8(4) + t$

Friday  
16-26